The DeltaDepth® filter is a nominally-rated polypropylene depth filter. It is available with ratings of 0.5 µm, 1 µm, 5 µm, 10 µm, 25 µm and 50 µm in 10-, 20-, 30- and 40-inch lengths.

The filter’s unique spiral construction creates a gradient pore structure that maximizes service life and flow rates.

DeltaDepth® filters are extremely robust and compatible with a wide array of chemicals and cleaning agents. The filter is free of surfactants, lubricants, resin binders, adhesives, antistatic or release agents and other additives.

The DeltaDepth® filter can be used for clarification, polishing and prefiltration in the pharmaceutical/biological, cosmetics/personal care, microelectronics, food and beverage, water purification and chemical process industries.

The filter is also highly effective in filtering potable water, photographic chemicals, paints and coatings, and electroplating fluids.

**Features and Benefits**

- Gradient-density media provides high flow rates
- Rigid support core enables use at high flows and differential pressures
- High dirt-holding capacity gives long service life for improved economics
- Integral media structure resists contaminant unloading even at high differential pressures
- Wide chemical compatibility allows for versatility in applications and cleaning/maintenance
- Wide range of lengths and connections retrofits existing housings

**Typical Applications**

**Pharmaceutical/Biological**
- Blood products
- Growth media
- Buffers
- Protein solutions
- Topicals, orals, otics
- Product and process water
- Fermentation liquids
- Acids, bases, solvents
- Pre-chromatography

**Cosmetics/Personal Care**
- Aftershaves, mouthwashes
- Oils, lotions, shampoos
- Perfumes, colognes

**Microelectronics**
- Acids, bases, solvents
- CMP slurries
- Photochemicals
- Magnetic coatings
- Wafer cleaning

**Chemical Process**
- Alkalis, solvents
- Organic/inorganic acids
- Process water

**Food and Beverage**
- Beer and wine
- Bottled and spring water
- Juices and soft drinks
- Edible oils
- Vinegar
- Make-up and process water
- Sweeteners

**Photographic**
- Chemicals and emulsions
- Process water/rinse water

**Metal Finishing**
- Electroplating
- Paint/resin coating

**Water Purification Systems**
- Post carbon beds, pre-RO
- Pre/post DI
- UPW
- Water reclaim

**Potable Water**
**Product Specifications**

**Materials of Construction**
- **Filter Media:** Polypropylene
- **Core:** Polypropylene
- **End Caps:** Polypropylene
- **Sealing Method:** Thermal bonding
- **O-rings:** Buna, EPR, silicone, Teflon® over silicone, Teflon® over Viton®
- **Gaskets:** Polyethylene

DeltaDepth® filter cartridges meet the requirements as specified in the current USP Class VI plastics tests. All materials of construction listed above are FDA approved for food contact use per CFR Title 21,177. DeltaDepth® cartridges are manufactured in conformance to cGMP. No binders, lubricants, adhesives, surfactants, anti-static or release agents are used in its construction. Filters comply with European Commission Directive 2002/72/EC and subsequent amendments up to 2008/39/EC and Commission Regulation (EU) No 10/2011.

**Cartridge Dimensions (nominal)**
- **Diameter:** 2.5” (6 cm)
- **Nominal Lengths:** 10”, 20”, 30”, 40” (25, 50, 75, 100 cm)

**Nominal Filtration Ratings**
- 0.5 µm, 1 µm, 5 µm, 10 µm,
- 25 µm, 50 µm

**Maximum Operating Temperatures & Pressures**
- **Δp 80 psi @ 100 °F**
  - (Δp 5,5 bar @ 38 °C)
- **Δp 60 psi @ 150 °F**
  - (Δp 4,1 bar @ 66 °C)
- **Δp 30 psi @ 180 °F**
  - (Δp 2,1 bar @ 82 °C)

**Sterilization**
- **Steam-in-place (SIP):**
  - saturated steam @ 121-135 °C, 30-60 minutes
  - [15 psi (1 bar) to 30 psi (2 bar), 30-60 minutes]
- **Autoclave:** 121-135 °C, 30-60 minutes

**Sanitization**
- Hot water maximum 90 °C, 30 minutes
End Cap Configuration

-226 O-ring
External -226 O-rings with locking tabs; open end for C6 and F6 SOE configurations

-222 O-ring
External -222 O-rings; open end for C2 and F2 SOE configurations

Flat Gasket
Flat Gasket; open end for GS and GL DOE configurations

Button Cap
Button Cap; closed end for C2 and C6 SOE configurations

Alignment Fin
Alignment Fin; closed end for F2 and F6 SOE configurations

Ordering Information

<table>
<thead>
<tr>
<th>Filter Media</th>
<th>Nominal Rating (μm)</th>
<th>Cartridge Length</th>
<th>End Cap Configuration</th>
<th>Reinforcement Ring Option</th>
<th>O-Ring Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>DDN = DeltaDepth® nominally-rated polypropylene depth filter</td>
<td>0.5</td>
<td>1 = 10&quot; (25 cm)</td>
<td>C2 = SOE; -222 O-rings, button cap end</td>
<td>(Blank) = Standard - no reinforcement ring</td>
<td>B = Buna</td>
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<tr>
<td></td>
<td>1</td>
<td>2 = 20&quot; (50 cm)</td>
<td>F2 = SOE; -222 O-rings fin end</td>
<td>R = Reinforcement ring; required for autoclave/ SIP applications</td>
<td>E = EPR</td>
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<tr>
<td></td>
<td>10</td>
<td>3 = 30&quot; (75 cm)</td>
<td>C6 = SOE; -226 O-rings button cap end</td>
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<td>S = Silicone</td>
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<tr>
<td></td>
<td>25</td>
<td>4 = 40&quot; (100 cm)</td>
<td>F6 = SOE; -226 O-rings, fin end</td>
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<td>T = Teflon® over silicone</td>
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<tr>
<td></td>
<td>50</td>
<td></td>
<td>GS = DOE; flat gaskets (9.75&quot;, 19.5&quot;, 29.25&quot;, 39&quot; length filters)</td>
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<td>V = Viton®</td>
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<td>GL = DOE; flat gaskets (10&quot;, 20&quot;, 30&quot;, 40&quot; length filters)</td>
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<td>X = Teflon® over Viton®</td>
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<td>P = Polyethylene</td>
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<td>Polypropylene gaskets (GS/GL end caps only)</td>
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